PE NUMBER: 0603854F

PE TITLE: Wideband MILSATCOM (Space)

| | RDT&E BUDGET ITEM J | USTIFIC | ATION | , , | | | | | DATE February 2002 | | |
|------|---|-------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|--|
| | T ACTIVITY Demonstration and Validation | | | R AND TITLE 4F Wide | | SATCO | /I (Space | e) | | | |
| | COST (\$ in Thousands) | FY 2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | Cost to Complete | Total Cost | |
| | Total Program Element (PE) Cost | 119,122 | 99,033 | 20,009 | 43,017 | 22,556 | 14,845 | 0 | 0 | 551,222 | |
| 2679 | Global Broadcast Service (GBS) Phases 1 and 2 | 31,564 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 258,625 | |
| 4811 | Wideband Gapfiller | 78,011 | 81,973 | 1,996 | 1,809 | 1,935 | 0 | 0 | 0 | 171,303 | |
| 4870 | Command & Control System Consolidated (CCSC) | 9,547 | 17,060 | 18,013 | 41,208 | 20,621 | 14,845 | 0 | 0 | 121,294 | |
| | Quantity of RDT&E Articles | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

NOTE: In FY 2001, project 642679, GBS efforts were transferred to PE 0603840F in order to fund GBS as it's own PE in FY 2002-2007.

(U) A. Mission Description

Provide the DoD with high data rate (Wideband) MILSATCOM services in accordance with the Joint Requirements Oversight Council (JROC), Joint Space Management Board approved MILSATCOM Architecture (Aug 96), and the MILSATCOM Capstone Requirements Document (CRD) approved by the JROC in Oct 97.

Global Broadcast Service (GBS) will provide efficient, high data rate broadcast capability between many distributed information sources and warfighters who receive the broadcast directly on small, inexpensive user terminals. GBS Phase 1 was started in 1996 as a Continental United States (CONUS)-based testbed for requirements definition and operational concept refinement using a leased commercial space segment (satellite). Phase 2 provides near worldwide, limited capability at military frequencies hosted on three Navy Ultra High Frequency Follow-On (UFO) satellites augmented with leased service over CONUS and Europe/SWA.

The Wideband Gapfiller System (WGS) satellites will augment the DoD's Defense Satellite Communications System (DSCS) X-band and Global Broadcast Service (GBS) Ka-band capabilities. In addition, WGS will provide a new two-way Ka-band service. The first WGS launch is scheduled for FY04, and the remaining two are scheduled for FY05.

Page 1 of 13 Pages

Exhibit R-2 (PE 0603854F)

RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit)

DATE

February 2002

BUDGET ACTIVITY

PE NUMBER AND TITLE

04 - Demonstration and Validation

0603854F Wideband MILSATCOM (Space)

(U) A. Mission Description Continued

The Command and Control System-Consolidated (CCS-C) provides an integrated commercial-based command and control system for all the MILSATCOM satellite constellations.

(U) B. Budget Activity Justification

(U) Funding is in Budget Activity 4, Demonstration and Validation to support:

WGS: making maximum use of commercial technology and practices by modifying commercial satellites to support unique military requirements, and CCS-C: competitive demonstration phase

(U) C. Program Change Summary (\$ in Thousands)

| | | <u>FY 2001</u> | FY 2002 | <u>FY 2003</u> | Total Cost |
|-----|---|----------------|---------|----------------|------------|
| (U) | Previous President's Budget | 134,029 | 96,670 | 26,670 | 561,206 |
| (U) | Appropriated Value | 121,029 | 100,670 | | |
| (U) | Adjustments to Appropriated Value | | | | |
| ı | a. Congressional/General Reductions | -1,110 | -1,637 | | |
| | b. Small Business Innovative Research | -295 | | | |
| l | c. Omnibus or Other Above Threshold Reprogram | -2,196 | | | |
| l | d. Below Threshold Reprogram | 1,694 | | | |
| | e. Rescissions | | | | |
| (U) | Adjustments to Budget Years Since FY 2002 PBR | | | -6,661 | |
| (U) | Current Budget Submit/FY 2003 PBR | 119,122 | 99,033 | 20,009 | 551,222 |
| | | | | | |

(U) Significant Program Changes:

(U) In FY 2001, project 642679, GBS efforts were transferred to PE 0603840F in order to fund GBS as it's own stand alone PE in FY 2002-2007.

Page 2 of 13 Pages

Exhibit R-2 (PE 0603854F)

| | | UNC | LASSIFI | ED | | | | | | |
|---|--|--|--|---|---|---|---|--|------------------------------------|--|
| RDT&E BUDGET ITEM JU | JSTIFIC | ATION S | SHEET | (R-2A E | xhibit) | | DATE | | ry 2002 | |
| BUDGET ACTIVITY 04 - Demonstration and Validation | | | | | | | | | | |
| COST (\$ in Thousands) | FY 2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | Cost to Complete | Total Cost | |
| 2679 Global Broadcast Service (GBS) Phases 1 and 2 | 31,564 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 258,625 | |
| NOTE: In FY 2001, project 642679, GBS efforts were tra (U) A. Mission Description GBS will provide DoD with efficient, high data rate small, inexpensive user terminals in accordance wit Apr 1995. Broadcast data includes digitized imager through FY98 for initial testing and concept explorate ground infrastructure for broadcast management and 10 providing near-worldwide service, and (2) le 00 (awaiting ADM). | e connectivity h the GBS O ry, logistics a ntion. Phase t and uplink a | to many disperational R nd weather of the capability and receive e | stributed info equirements data, maps, o was extende equipment w | ormation sou Document (operational of d under Phas hich work w | orces and wa (ORD) valid- orders, and vise 2 due to d with: (1) spac | rfighters who ated by the J ideo. GBS F lelay in deplo e packages o | o will receive oint Require Phase 1 was bying capabion Navy ope | ements Overs a single chan ility. GBS Pl rational satel | hase 2 includes lites UFO 8, 9, | |

FY 2001 (\$ in Thousands)

| (U |) \$20.872 | Continued Sy | vstem Devel | opment and Test |
|----|------------|--------------|-------------|-----------------|
| | | | | |

Continued Phase 2 Government System Integration (U) \$2,995

\$2,888 Continued Program Support

(U) \$1,210 Continued Field Survey and Integration (U) \$2,300 Continued Navy Terminal Support

(U) \$1,299 Provided System Test and Evaluation Support

\$31,564 Total

FY 2002 (\$ in Thousands)

(U) \$0 No activity; project funded in PE 0603840F, Global Broadcast Service, effective FY02.

(U) \$0 Total

FY 2003 (\$ in Thousands)

(U) \$0 No activity; project funded in PE 0603840F, Global Broadcast Service, effective FY02.

(U) \$0 Total

Project 2679 Exhibit R-2A (PE 0603854F) Page 3 of 13 Pages

DATE RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2A Exhibit) February 2002 BUDGET ACTIVITY PE NUMBER AND TITLE **PROJECT** 04 - Demonstration and Validation 0603854F Wideband MILSATCOM (Space) 2679 (U) B. Project Change Summary (U) In FY 2001, project 642679, GBS efforts were transferred to PE 0603840F in order to fund GBS as it's own PE in FY 2002-2007. (U) FY01 System Development and Test includes OSD Direction to support the transition from Joint Broadcast Service to the GBS Phase 2 capability. (U) C. Other Program Funding Summary (\$ in Thousands) FY 2001 FY 2002 FY 2003 FY 2004 FY 2005 FY 2006 FY 2007 Cost to **Total Cost** Actual Estimate Estimate Estimate **Estimate** Estimate Estimate Complete (U) Other APPN Note: All the Services and several DoD agencies have many programs which interface with or support GBS. Examples include: Defense Information System Network (DISN), DISA Information Dissemination Management Program, ARPA Battlefield Awareness and Data Dissemination (BADD) Advanced Concept Tactical Demonstration (ACTD), ARPA-DISA Bosnia Command Control Augmentation (BC2A) Program including Joint Broadcast Service (JBS), Navy UFO Program, Army Ground Terminal Programs, Navy SATCOM Ship Terminal Program, and Air Force MILSATCOM Terminals (PE 0303601): AF GBS Receive Terminals (Project 836780, line P-67, PE 0303601F, Milstar Satellite Comm Sys, Other Procurement, AF Ground Multiband Terminal (GMT) Develop, and AF Wideband Terminal (AWT) Development. (U) D. Acquisition Strategy (U) The acquisition strategy is a spiral development/incremental build approach using Integrated Product Development (IPD)/Integrated Product Team (IPT) approach. (U) E. Schedule Profile 1 4 (U) See schedule profile in PE 0603840F * = Completed Event; X = Planned Event Exhibit R-2A (PE 0603854F Project 2679 Page 4 of 13 Pages

| | RDT&E PROG | RAM ELEI | MENT/PI | ROJECT CO | ST BR | REAKDO | WN (R-3) | | DATE F 6 | ebruary 20 | 002 |
|------|----------------------------------|------------------|-------------------|--------------------|----------------|--------------|---------------|---------------|-----------------|---------------|----------------|
| BUDO | GET ACTIVITY | | | | PE NUMBI | ER AND TITLE | | | | - | PROJECT |
| 04 - | Demonstration and V | alidation | | | 060385 | 4F Widel | oand MILS | ATCOM (S | Space) | | 2679 |
| (U) | A. Project Cost Breakdown | (\$ in Thousand | ls) | | | | | | | | |
| | • | | | | | | FY 2 | | FY 200 | <u>)2</u> | FY 2003 |
| (U) | System Development and Tes | | | | | | | ,872 | | | |
| (U) | Phase 2 Government System | Integration | | | | | | ,995 | | | |
| (U) | Program Support | | | | | | · | ,888 | | | |
| (U) | Field Survey and Integration | | | | | | 1, | ,210 | | | |
| (U) | Navy Terminal Support | | | | | | 2, | ,300 | | | |
| (U) | System Test & Evaluation Su | pport | | | | | 1, | ,299 | | | |
| (U) | Total | | | | | | 31, | ,564 | | | |
| (U) | B. Budget Acquisition Histo | ry and Plannin | g Informatio | n (\$ in Thousands | <u>s)</u> | | | | | | |
| (U) | Performing Organizations: | | | | | | | | | | |
| | Contractor or | Contract | | | | | | | | | |
| | Government | Method/Type | Award or | Performing | Project | | | | | | |
| | Performing | or Funding | Obligation | Activity | Office | Total Prior | Budget | Budget | Budget | Budget to | <u>Total</u> |
| | Activity | <u>Vehicle</u> | <u>Date</u> | <u>EAC</u> | <u>EAC</u> | to FY 2001 | FY 2001 | FY 2002 | FY 2003 | Complete | Program |
| | Product Development Organiz | zations | | | | | | | | | |
| | Raytheon Sys Co. | CPAF | 18 Nov 97 | N/A | N/A | 124,057 | 20,872 | | | | 144,929 |
| | Government/Various | Various | Various | N/A | N/A | 65,343 | 6,505 | | | | 71,848 |
| | Support and Management Org | ganizations | | | | | | | | | |
| | Various | Various | Various | N/A | N/A | 35,790 | 2,888 | | | | 38,678 |
| | Test and Evaluation Organiza | <u>tions</u> | | | | | | | | | |
| | Support for Development & | Various | Various | N/A | N/A | 1,871 | 1,299 | | | | 3,170 |
| | Operational Test | | | | | | | | | | |
| (U) | Government Furnished Pro | perty: | | | | | | | | | |
| | | Contract | | | | | | | | | |
| | | Method/Type | Award or | | | | | | | | |
| | <u>Item</u> | or Funding | Obligation | <u>Delivery</u> | | Total Prior | Budget | Budget | Budget | Budget to | <u>Total</u> |
| | Description | Vehicle | Date | Date | | to FY 2001 | FY 2001 | FY 2002 | FY 2003 | Complete | Program |
| ח | roject 2679 | <u></u> | | | 5 of 13 Pag | | | | | it R-3 (PE 06 | S03854E) |
| Р | 10,601 2079 | | | Page | on 15 Pag | ges | | | EXIID | 11 N-3 (FE 00 | JU3034F) |

| | | RAM ELEM | IENT/P | ROJECT (| COST BREAKDO | WN (R-3) | | DATE F 6 | ebruary 20 | |
|-----|--|--|-------------------------------------|--------------------------------|--|---|-------------------|------------------------|-----------------------|--|
| | GET ACTIVITY - Demonstration and ' | Validation | | | PE NUMBER AND TITLE 0603854F Widel | oand MILS | Space) | PROJECT 2679 | | |
| (U) | Item Description Product Development Proper TBD Support and Management Pr TBD Test and Evaluation Property | Contract Method/Type or Funding of Vehicle rty roperty | : Award or Obligation Date | <u>Delivery</u> <u>Date</u> | Total Prior to FY 2001 | Budget FY 2001 | Budget FY 2002 | Budget FY 2003 | Budget to Complete | <u>Total</u> <u>Prograr</u> |
| | Subtotals Subtotal Product Developme Subtotal Support and Manag Subtotal Test and Evaluation Total Project | gement | | | Total Prior to FY 2001 189,400 35,790 1,871 227,061 | Budget FY 2001 27,377 2,888 1,299 31,564 | Budget FY 2002 | Budget FY 2003 | Budget to Complete | Total <u>Program</u> 216,777 38,678 3,170 258,625 |
| F | Project 2679 | | | Pa | ge 6 of 13 Pages | | | Exhib | it R-3 (PE 06 | 03854F) |

| RDT&E BUDGET ITEM | DATE | PATE February 2002 | | | | | | | |
|--|-------------------|---------------------|---------------------|---------------------------------|---------------------|---------------------|---------------------|---------------------|------------------------|
| BUDGET ACTIVITY 04 - Demonstration and Validation | | | | R AND TITLE 4F Wide l | band MIL | .SATCON | /I (Space |) | PROJECT 4811 |
| COST (\$ in Thousands) | FY 2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | Cost to Complete | Total Cost |
| 4811 Wideband Gapfiller | 78,011 | 81,973 | 1,996 | 1,809 | 1,935 | 0 | 0 | 0 | 171,303 |

(U) A. Mission Description

The Wideband Gapfiller Satellites (WGS) will provide the DoD with high data rate military satellite communication (MILSATCOM) services in accordance with the Joint Space Management Board approved MILSATCOM Architecture dated Aug 96, the MILSATCOM Capstone Requirements Document approved by the Joint Requirements Oversight Council (JROC) in Oct 97, and JROC approved WGS Operational Requirements Document (May 00). This program was conceived to augment the near term 'bandwidth Gap' in Warfighter communication needs. The critical first WGS launch is scheduled for 2QFY04 with the remaining two launches scheduled in FY05.

These dual frequency Wideband Gapfiller Satellites will augment the DoD's two-way Defense Satellite Communications System X-band service and one-way Global Broadcast Service Ka-band capabilities. In addition, WGS will provide a new high capacity two-way Ka-band service.

(U) FY 2001 (\$ in Thousands)

(U) \$69,011 Began EMD, including the Non-Recurring Engineering for all three satellites

(U) \$3,418 Began Joint Terminal Engineering Office (JTEO) Support

(U) \$5,582 Began Program Support

(U) \$78,011 Total

(U) FY 2002 (\$ in Thousands)

(U) \$76,057 Complete EMD, including the NRE for all three satellites

(U) \$3,867 Continue JTEO Support (U) \$2,049 Continue Program Support

(U) \$81,973 Total

(U) FY 2003 (\$ in Thousands)

(U) \$1,996 Continue JTEO Support

(U) \$0 Program Support accomplished in procurement appropriation

(U) \$1,996 Total

Project 4811 Page 7 of 13 Pages Exhibit R-2A (PE 0603854F)

| | RDT&E BUDG | SET ITEM | JUSTIF | ICATION | SHEET (| R-2A Exh | nibit) | D | ^{ATE} Februar | y 2002 |
|--------------|---|-------------------------------------|------------------|---------------------|--------------------------|---------------------|---------------------|---------------------|-------------------------------|------------------------|
| | GET ACTIVITY - Demonstration and Val | idation | | | PE NUMBER 0603854 | | nd MILSA | TCOM (Spa | ace) | PROJECT 4811 |
| (U) | B. Project Change Summary No change. | | | | | | | | | |
| (U) | C. Other Program Funding Su | mmary (\$ in 7 FY 2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | Cost to Complete | Total Cost |
| (U) | MPAF, PE 0303600F, WGS, Line P-18, Line P-19 | 24,652 | 370,956 | 189,666 | 18,657 | 24,386 | 14,326 | 14,481 | 0 | 657,124 |
| (U) | OPAF, PE 0603854F, WGS PIPs | 0 | 0 | 16,092 | 32,226 | 0 | 0 | 0 | 0 | 48,318 |
| (U) | OPAF, PE 0303600F, CCS-C AF Terminals in PE 0303601F, 0 | 0 Other Procuren | 0 nent, AF | 5,597 | 8,357 | 2,204 | 0 | 0 | 0 | 16,158 |
| | D. Acquisition Strategy The WGS program will make ma Procurement funds, and the Non- on 2 Jan 01. | | | | | | | | | |
| (U) | E. Schedule Profile | | | | FY 200 | 1 | FV | 2002 | FV | 2003 |
| | | | | 1 | | 3 4 | 1 2 | 3 4 | 1 2 | 3 4 |
| (U) (U) | DAB - MS II/III EMD/Production Contract Award | ď | | * | * | | | | | |
| \ - <i>/</i> | EMD Completion x = planned event; * = completed | | | | | | | X | | |
| | | | | | | | | | | |
| F | Project 4811 | | | Pag | e 8 of 13 Page | S | | | Exhibit R-2A (F | PE 0603854F) |

| | RDT&E PROG | RAM ELE | MENT/PI | ROJECT C | OST BF | REAKDOV | VN (R-3) | | DATE F e | ebruary 20 | 002 |
|--------------------------|--|---|---|---|---|--|---|---|---|-------------------------------------|--|
| | GET ACTIVITY • Demonstration and | Validation | | | | ER AND TITLE 54F Wideb | and MILS | ATCOM (S | Space) | | PROJECT 4811 |
| (U) | A. Project Cost Breakdow | n (\$ in Thousan | ds) | | | | | | | | |
| (U) (U) (U) (U) | EMD JTEO Support Program Support Total | | | | | | 3, 5, | 2001 011 418 582 011 | FY 200 76,05 3,86 2,04 81,97 | 7 57 9 | FY 2003 0 1,996 0 1,996 |
| (U) | B. Budget Acquisition Hist | ory and Plannin | g Informatio | n (\$ in Thousand | <u>ls)</u> | | | | | | |
| (U) | Performing Organizations: Contractor or Government Performing Activity Product Development Organ WGS Satellite EMD Support and Management Or JTEO Pre-EMD International Studies Program Support Test and Evaluation Organiz AFOTEC, DT&E | Contract Method/Type or Funding Vehicle sizations FFP rganizations PR Form 277 SS/CFFF/AF Various | Award or Obligation Date Jan 01 Continuing Dec 99 Various Various TBD | Performing Activity EAC 148,021 11,404 4,910 669 8,909 TBD | Project Office EAC 148,021 11,404 4,910 669 8,909 TBD | Total Prior to FY 2001 0 0 4,910 669 0 | Budget FY 2001 69,011 3,418 0 0 5,582 | Budget FY 2002 76,057 3,867 0 0 2,049 | Budget FY 2003 0 1,996 0 0 | Budget to Complete 0 3,744 0 0 0 | Total Program 145,068 13,025 4,910 669 7,631 |
| (U) | Item Description Product Development Proper | Contract Method/Type or Funding Vehicle | Award or Obligation Date | <u>Delivery</u> <u>Date</u> | | Total Prior to FY 2001 | <u>Budget</u> FY 2001 | Budget FY 2002 | Budget FY 2003 | Budget to Complete | <u>Total</u> <u>Program</u> |
| Р | roject 4811 | | | Page | e 9 of 13 Pa | ges | | | Exhib | it R-3 (PE 06 | 603854F) |

| RDT&E PROGRAM ELEMENT/PR | RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | | |
|---|--|--|--|--|--|---|--|--|--|
| BUDGET ACTIVITY 14 - Demonstration and Validation | PE NUMBER AND TITLE 0603854F Wideb | and MILS | ATCOM (S | Space) | | PROJECT 4811 | | | |
| U) Government Furnished Property Continued: Support and Management Property TBD Test and Evaluation Property TBD Subtotals Subtotal Product Development Subtotal Support and Management Subtotal Test and Evaluation Total Project | Total Prior to FY 2001 0 5,579 5,579 | Budget FY 2001 69,011 9,000 78,011 | Budget FY 2002 76,057 5,916 81,973 | Budget FY 2003 0 1,996 1,996 | Budget to Complete 0 3,744 3,744 | Tota Progra 145,06 26,23 171,30 | | | |
| Project 4811 | Page 10 of 13 Pages | | | Exhib | it R-3 (PE 06 | 03854F) | | | |

| | RDT&E BUDGET ITEM JU | STIFIC | ATION S | SHEET (| (R-2A E | xhibit) | | DATE | DATE February 2002 | | |
|------|--|-------------------|---|---------------------|---------------------|---------------------|---------------------|---------------------|------------------------|------------|--|
| | T ACTIVITY Demonstration and Validation | | PE NUMBER AND TITLE 0603854F Wideband MILSATCOM (Space) | | | | | | PROJECT 4870 | | |
| | COST (\$ in Thousands) | FY 2001 Actual | FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | Cost to Complete | Total Cost | |
| 4870 | Command & Control System Consolidated (CCSC) | 9,547 | 17,060 | 18,013 | 41,208 | 20,621 | 14,845 | 0 | 0 | 121,294 | |

(U) A. Mission Description

The MILSATCOM Command and Control System-Consolidated (CCS-C) system is being acquired to provide integrated launch and on-orbit command and control (C2) functionality for MILSATCOM satellites as the current capability provided by the Air Force Satellite Control Network (PE 0305110F) phases out according to plan. CCS-C will use modified commercial off the shelf hardware/software to control all emerging and legacy MILSATCOM systems (six different constellations) at reduced operating and maintenance costs.

(U) FY 2001 (\$ in Thousands)

(U) \$6,247 Began Concept Demonstration Phase

(U) \$3,300 Began Program Support

(U) \$9,547 Total

(U) FY 2002 (\$ in Thousands)

(U) \$953 Complete Concept Demonstration Phase

(U) \$12,753 Begin Development of Command and Control Functionality

(U) \$3,354 Continue Program Support

(U) \$17,060 Total

(U) <u>FY 2003 (\$ in Thousands)</u>

(U) \$15,310 Continue development of command and control functionality

(U) \$2,703 Continue Program Support

(U) \$18,013 Total

(U) B. Project Change Summary

(U) None.

Project 4870 Page 11 of 13 Pages Exhibit R-2A (PE 0603854F)

| | RDT&E BUDG | ET ITEM | JUSTIFI | CATION | SHEET (| R-2A Exh | nibit) | D. | ATE February | 2002 |
|-------------------|--|-------------------------------------|-----------------------------|---------------------|--------------------------|------------------|---------------------|------------------|------------------------|------------------------|
| | GET ACTIVITY - Demonstration and Vali | dation | | | PE NUMBER 0603854 | | nd MILSA | ГСОМ (Spa | ace) | PROJECT 4870 |
| (U) | C. Other Program Funding Sun | nmary (\$ in T FY 2001 Actual | Thousands) FY 2002 Estimate | FY 2003 Estimate | FY 2004 Estimate | FY 2005 Estimate | FY 2006 Estimate | FY 2007 Estimate | Cost to Complete | Total Cost |
| (U) (U) (U) | AF RDT&E Other APPN OPAF, PE 030600F, CCS-C BA-11 Line-61 | | 0 | 5,597 | 8,357 | 2,204 | 0 | 0 | 0 | 16,158 |
| (U) | D. Acquisition Strategy Competitive contracts were award down selection to a single team in | | | | | | nonstration pha | se. Both conta | ain fixed price option | ons supporting |
| (U) | E. Schedule Profile | | | 1 | <u>FY 200</u> 2 | <u>1</u> 3 4 | <u>FY</u> 1 2 | 2002 3 4 | <u>FY</u> 1 | 2 <u>003</u> 3 4 |
| (U) (U) (U) | Concept Demonstration Contract Completion of Concept Demonstr Development Contract Downselect* = Completed Event X = Planned Event | ation | | | * | | X X | | | |
| F | Project 4870 | | | Page | : 12 of 13 Page | es | | | Exhibit R-2A (Pl | E 0603854F) |

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3) | | | | | | | | | DATE February 2002 | | |
|--|-----------------------------------|-------------------|-------------------|-------------------|---|-------------|----------------|---------------|--------------------|-----------------|----------------|
| BUDGET ACTIVITY | | | | | PE NUMBER AND TITLE 0603854F Wideband MILSATCOM (S | | | | PROJECT | | |
| 04 - | 04 - Demonstration and Validation | | | | | 94F Wideb | | ATCOM (S | space) | | 4870 |
| (U) | A. Project Cost Breakdown | ı (\$ in Thousand | <u>ds</u>) | | | | | | | | |
| | | | | | | | <u>FY 2001</u> | | FY 2002 | | FY 2003 |
| (U) | Concept Demonstration Phase | | | | | | 6,247 | | 588 | | 0 |
| (U) | Development Phase | | | | | | | 0 | 13,27 | | 15,310 |
| (U) | Program Support | | | | | | , | 300 | 3,199 | | 2,703 |
| (U) | Total | | | | | | 9, | 547 | 17,06 | 0 | 18,013 |
| (U) | B. Budget Acquisition History | ory and Plannin | g Information | (\$ in Thousand | <u>ls)</u> | | | | | | |
| (U) | Performing Organizations: | | | | | | | | | | |
| | Contractor or | Contract | | | | | | | | | |
| | Government | Method/Type | Award or | <u>Performing</u> | Project | | | | | | |
| | Performing | or Funding | Obligation | <u>Activity</u> | <u>Office</u> | Total Prior | <u>Budget</u> | <u>Budget</u> | Budget | Budget to | <u>Total</u> |
| | <u>Activity</u> | <u>Vehicle</u> | <u>Date</u> | <u>EAC</u> | <u>EAC</u> | to FY 2001 | <u>FY 2001</u> | FY 2002 | FY 2003 | <u>Complete</u> | <u>Program</u> |
| | Product Development Organi | | | | | | | | | | |
| | Demonstration Contractors | FFP | Feb 01 | 9,047 | 9,047 | 0 | 6,247 | 588 | 0 | 0 | 6,835 |
| | Development Contractor | CPAF | Feb 02 | 94,764 | 94,764 | 0 | 0 | 13,273 | 15,310 | 64,528 | 93,111 |
| | Support and Management Or | ganizations | | | | | | | | | |
| | Various | | Various | | | 0 | 3,300 | 3,199 | 2,703 | 7,728 | 16,930 |
| | Test and Evaluation Organiza | ations | | | | | | | | | |
| | | | | | | Total Prior | <u>Budget</u> | Budget | <u>Budget</u> | Budget to | <u>Total</u> |
| | Subtotals | | | | | to FY 2001 | FY 2001 | FY 2002 | FY 2003 | <u>Complete</u> | <u>Program</u> |
| | Subtotal Product Development | | | | 0 | 6,247 | 13,861 | 15,310 | 64,528 | 99,946 | |
| | Subtotal Support and Management | | | | 0 | 3,300 | 3,199 | 2,703 | 7,728 | 16,930 | |
| | Subtotal Test and Evaluation | | | | | | | | | | |
| | Total Project | | | | | 0 | 9,547 | 17,060 | 18,013 | 72,256 | 116,876 |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
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